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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/518,051 08/22/95 RUSSELL

S 74023

EXAMINER

E6M1/0724

ARTUNDIST U, PAPER NUMBER

3

COMMANDING OFFICER  
LEGAL COUNSEL FOR PATENTS  
NCCOSC RDTE DIV CODE 0012  
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SAN DIEGO CA 92152-5765

2609

DATE MAILED: 07/24/97

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on \_\_\_\_\_ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.      | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474..    | 6. <input type="checkbox"/> _____   |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1-11 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-11 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

**EXAMINER'S ACTION**

Art Unit:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “ **electronically programmable driver**” and “ **interface circuitry**” must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,6, 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by applicants's Admitted Prior Art (Figures 1-3) .

As to claims 1-3,6,10-11, Applicant Admitted Prior Art discloses a super twisted nematic liquid crystal display system figure 1-3 (page 8, the last 2 lines) comprising: a polarizer (16) , a beam of incident light (22), a pixel sequence (14) including a liquid crystal display (10), an

Art Unit:

analyzer (17), a gray scale control (see, page 8, lines 6-23), a transparent substrates (12) a drive circuitry (18).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5,8 and 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant Admitted Prior Art (figs.1-3) in view of Nelson (5,504,514).

As to claims 4-5,8 and 9, Applicant Admitted Prior Art disclose a lcd device but has failed to disclose a gray scale control includes a programmable driver. However, Nelson clearly teaches that it is conventional for a display device to have a programmable driver chip (col.6, lines 58-67).

Therefore, it would have been obvious to one of skilled in the art at the time of the invention was made to have incorporated the programmable driver of Nelson's into the device of Applicant Admitted Prior Art system so that the driver chip can enhance or reduce the light output of the individual element.

As to claim 8, active matrix liquid crystal display is well known.

Art Unit:

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lau et al (4,177,084).

In regard to claim 7, the Admitted Prior Art disclose a liquid crystal display but has failed to teach the LCD including a sapphire. Lau is cited to teach that it well known for a LCD to have a sapphire (see Abstract).

Therefore, it would have been obvious to one of skill in the art at the time of the invention was made to used Lau's sapphire into the device of Applicant's Admitted Prior Art since this will greatly reduce the SOS interface properties and enabling a high quality silicon layer.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (703) 305-4880. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for this Group is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Serial Number: 08/518,051

Page 5

Art Unit:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 305- (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

A. Mengistu

July 20, 1997

  
Amare Mengistu

Art Unit 2609